

**Orono School Department
Penobscot County
Orono, Maine
A-109-71-H-M**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #2**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. The Orono School Department of Orono, Maine was issued Air Emission License A-109-71-F-R on March 13, 2002, permitting the operation of emission sources associated with the Orono High School (high school) and the Orono Middle School (middle school).
2. The Orono School Department subsequently amended the air emission license for the high school and the middle school to include previously unlicensed equipment located at the Asa C. Adams Elementary School (elementary school).
3. The Orono School Department has requested an amendment of the air emission license for the high school, middle school and elementary school to include an increase in the licensed fuel limit.

B. Emission Equipment

The Orono School Department is licensed to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler #1	2.6	29	#2 fuel oil, 0.5%	1
Boiler #2	2.7	28	#2 fuel oil, 0.5%	1
Boiler #3	2.2	25	#2 fuel oil, 0.5%	2
Boiler #4	2.6	29	#2 fuel oil, 0.5%	2
Boiler #5	3.1	29	#2 fuel oil, 0.5%	3
Boiler #6	3.2	28	#2 fuel oil, 0.5%	3

C. Application Classification

A modification at a facility with a licensed emissions increase of under (4) four TPY for any one regulated pollutant and under (8) eight TPY for total pollutants is determined to be a minor revision and not a major or minor modification. This amendment is determined to be a minor revision and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Minor Revision Description

The current air emission license (A-109-71-F-R) for the Orono School Department includes four boilers, Boilers #1 and #2 at Orono High School and Boilers #3 and #4 at Orono Middle School, used primarily for facility hot water and heating needs. The four boilers have a total maximum design heat input capacity of 10.1 MMBtu/hr, firing #2 oil with a maximum sulfur content not to exceed 0.5% by weight. Orono School Department subsequently amended their air emission license in May, 2003 (A-109-71-G-M) to include the two #2 fuel oil-fired boilers at the Asa C. Adams Elementary School, a third school under the jurisdiction of the Orono School Department. The two Boilers, designated Boilers #5 and #6 have maximum design heat input values of 3.1 and 3.2 MMBtu/hr respectively, firing #2 fuel oil and are utilized to satisfy the heating needs of the elementary school. Orono School Department is currently licensed to burn a total of no greater than 100,000 gallons of #2 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight in the licensed boilers.

During an inspection conducted by the regional compliance inspector, it was found that the Orono School Department had slightly exceeded their fuel restriction limit. Subsequently, Orono School Department has applied for a minor revision to their air emission license to increase their fuel restriction so that the heating needs of the three schools may be satisfied without any future fuel restriction excedences. The Orono School Department may increase the fuel restriction up to 190,000 gallons of #2 fuel oil per year and not have an increase in potential annual emission of greater than minor revision thresholds.

C. Annual Emission Restrictions

The Orono School Department shall be restricted to the following annual emissions, based on a 12-month rolling total:

- The total fuel use for the facility shall not exceed 190,000 gal/yr. of #2 fuel oil with a maximum sulfur content not to exceed 0.5% by weight.

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	1.6
PM ₁₀	1.6
SO ₂	7.5
NO _x	6.7
CO	0.5
VOC	0.03

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the above total facility emissions, Orono School Department is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License amendment A-109-71-H-M subject to the conditions found in air emission license A-109-71-F-R, A-109-71-G-M and in the following conditions:

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The following shall replace Condition (16), paragraph A, of Air Emission License A-109-71-F-R and A-109-71-G-M:

- (16) A. Total annual combined fuel usage for all the boilers shall not exceed 190,000 gals/yr. #2 fuel oil with a maximum sulfur content of 0.5% by weight based on a 12-month rolling total. Fuel use records, consisting of fuel delivery receipts demonstrating percent sulfur content, shall be maintained on a monthly basis, in addition to the 12-month rolling total.
- (20) This amendment shall expire concurrently with Air Emission License A-109-71-F-R.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 11, 2004

Date of application acceptance: June 14, 2004

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality